

AN ANNOTATED LIST OF THE TRUE BUGS (HETEROPTERA) OF BERMUDA

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Abstract. — Listed from Bermuda are 45 species of Heteroptera, representing 14 families and 19 new island records. Only the mirid *Dagbertus bermudensis* Carvalho and Fontes is considered indigenous. All other species are thought to be adventive or introduced from eastern North America and the Caribbean Region. Available hosts and collection records for Bermuda, and general distribution are given for each species.

Key Words: arthropod fauna, inventory, Bermuda

This paper is part of a continuing series to inventory the arthropod fauna of Bermuda (Gordon and Hilburn 1989, Nakahara and Hilburn 1989a, b). Our purpose is to document the true bug fauna, to allow observations on faunal changes because of local extinction or future introductions, and to afford local biologists a means of recognizing potential pests and predators in conjunction with the included literature review and use of voucher specimens housed at the Bermuda Natural History Museum, Flatts.

Herein we report 45 species of Heteroptera from Bermuda, 19 of which are newly recorded. A number of previously recorded species have not been recollected in recent years, suggesting that they no longer occur on the islands. We were unable to confirm published records for the coreid *Euthoetha* sp., the pentatomid *Mormidea lugens* (Fabricius), and the scutellerid *Sphyracoris obliquus* Germar. These unconfirmed reports and several new records, based on single or

a few specimens, reflect the need for a continuing survey of the islands.

NATURAL HISTORY NOTES

Nakahara and Hilburn (1989a) reviewed the natural history of Bermuda, noting that because of its small size (54 sq. km/21 sq. mi.) and extreme isolation (1040 km/646 mi. from Cape Hatteras, North Carolina, USA), the fauna and flora are depauperate. Additionally, the aquatic insect life is limited to a few marine and brackish water species because there is no free-standing fresh water, except for temporary rain pools.

Prior to the present study, only 28 species of Heteroptera were reported from Bermuda. This figure can be compared with 166 species listed by Uhler (1894) from Grenada (133 sq. mi.; 344.5 sq. km), 126 species by Uhler (1893) from St. Vincent and Grenadines (150 sq. mi.; 388.5 sq. km), and 243 species by Van Duzee (1907) from Jamaica (4411 sq. mi.; 11,424.5 sq. km).

PAST WORK ON BERMUDIAN HETEROPTERA

Although numerous works treating the insects of Bermuda exist, relatively few have

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been devoted to Heteroptera. Kevan (1981), in his historical review of the terrestrial arthropods of Bermuda, discussed most of the early records of true bugs from 1603 through 1900. Uhler (1889) published the first list treating only Hemiptera (Heteroptera + Homoptera). Verrill (1902) added more insects, including 15 species of bugs. Van Duzee (1909) recorded nine species. Only a few other miscellaneous papers, treating mostly the applied aspects of Heteroptera, appeared until Ogilvie's (1928) "Preliminary Check List of the Insects of Bermuda." This paper, containing many host records and a listing of 28 species, has remained the most complete inventory of Bermudian bugs until the present study.

The Bermuda Department of Agriculture and Fisheries (BDAF) has maintained an insect collection since 1928. This collection is composed primarily of the L. Ogilvie (1928) material and later contributions by I. W. Hughes, Francis Monkman, and Kevin Monkman (Nakahara and Hilburn 1989a). Except for a small reference collection retained at the BDAF laboratory in Paget, this collection is now housed at the Bermuda Natural History Museum (BNHM) in Flatts.

CURRENT STUDY

The following list includes all Heteroptera currently found in the BNHM collection, those reported in the literature, and specimens collected by M. R. Wilson, CAB International Institute of Entomology, London (July 1988) and us (Hilburn, 1987-1988; Henry, Jan. 1988). All specimens were identified by the senior author, except the Cydnidae by R. C. Froeschner.

The heteropteran fauna of Bermuda is represented by 14 families as follows: Anthocoridae (4 spp.), Berytidae (1 sp.), Cimicidae (1 sp.), Coreidae (2 spp.), Corixidae (1 sp.), Cydnidae (2 spp.), Gerridae (1 sp.), Lygaeidae (9 spp.), Miridae (11 spp.), Nabidae (1 sp.), Pentatomidae (6 spp.), Reduviidae (2 spp.), Rhopalidae (2 spp.), and Scuteller-

idae (2 spp.). Only the mirid *Dagbertus bermudensis* Carvalho and Fontes is considered indigenous to Bermuda.

Although 28 species have been reported, several of these records are based on misidentifications or are synonyms. Therefore, despite the discovery of 19 previously unreported bugs, the 45 species reported here is only an increase of 17 over the 28 listed by Ogilvie (1928).

Names in this paper are arranged alphabetically by family, subfamily, tribe, genus, and species, followed by a list of literature mentioning Bermudian Heteroptera, the parishes (Fig. 1) where the respective bugs have been found, the month collected, a summary and reference to food plants and habits when known, and general distribution. Voucher material is housed in the collection of the Bermuda Natural History Museum, Flatts, the British Museum (Natural History), London, and the United States National Museum of Natural History, Washington, D.C.

Because Bermuda shares much of its fauna with that of eastern United States, Blatchley's (1926) "Heteroptera of Eastern North America" is one of the most useful references to consult for species recognition. Even though many of his names are outdated, their current status can be checked in the Henry and Froeschner (1988) Heteroptera Catalog. For more recent revisionary works containing keys and other information not cited in the above Heteroptera catalog, see the references listed under the respective taxa in the text.

HETEROPTERA OF BERMUDA

Family Anthocoridae

Subfamily Anthocorinae

Montandoniola moraguezi (Puton). Cock 1985: 120.

Parish records: Paget, St. George's (June-July).

This species was introduced into Bermuda in mid-1973 from specimens collect-

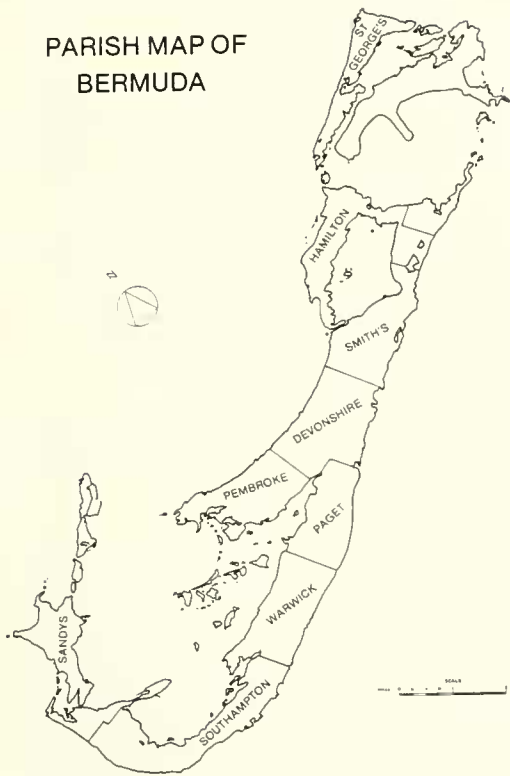


Fig. 1. Parish map of Bermuda (after Jones 1979).

ed in Hawaii to control the laurel thrips, *Gynaikothrips ficorum* (Marchal). Cock (1985) reported it well established by the end of 1973. Specimens collected in 1988 were found on *Petunia* sp. [Solanaceae]. It is widely distributed in the South Pacific islands and Hawaii. It also has been introduced into California (USA) and Canada but is not known to be established.

Orius insidiosus (Say) [insidious pirate bug].
Ogilvie 1928: 19.

Paris records: Devonshire, Paget, Sandys, Smith's, St. George's (Jan., Apr., July–Sept.).

This well-known species is a predator of small arthropods and has been the subject of numerous economic studies. Common on many plants throughout Bermuda, it is widespread from North to South America, and in the West Indies.

Subfamily Lasiochilinae

Lasiochilus fraternus Uhler. NEW RECORD.

Parish records: Paget, Smith's (Jan.).

In Bermuda, single males were beaten from the shrub *Raphiolepis indica* (L.) Lindley [Rosaceae] and an *Ipomoea* sp. [Convolvulaceae]. Previously *L. fraternus* was known only from Grenada based on the original description (Uhler 1894).

Subfamily Lyctocorinae

Xylocoris galactinus Fieber. NEW RECORD.

Parish record: Paget (Jan.).

In Bermuda, a single specimen was collected along Berry Hill Road, Paget. This widespread predatory species is found throughout Europe and North America, most often in stored grains and compost piles and under dead bark.

Family Berytidae

Subfamily Metacanthinae

Metacanthus tenellus Stål. NEW RECORD.

Parish records: Smith's (Jan., Nov.).

In Bermuda, adults and nymphs were abundant at Spittal Pond on *Acalypha alopecurioides* Jacq. [Euphorbiaceae]. This species is known from South America north to Florida and Texas in the United States, and the West Indies.

Family Cimicidae

Cimex lectularius Linnaeus [human bed-bug]. Verrill 1902: 386; Ogilvie 1928: 19.

Parish records: No Bermuda specimens examined.

This cosmopolitan species is found in all areas of human habitation.

Family Coreidae

Subfamily Coreinae

Anasa scorbutica (Fabricius). Ogilvie 1928: 18.

Parish records: Paget (Apr., June).

No Bermuda specimens have been collected since 1925. This species is a cucurbit specialist, known from the southern United States to South America, and the West Indies.

Euthoetha galeator (Fabricius). Ogilvie 1928: 18 (as *Euthoetha* sp.).

Parish records: No Bermuda specimens examined.

Ogilvie's (1928) record of "*Euthoetha* sp." may represent a misidentification; however, none of his material was found to allow us to verify this speculation. *Euthoetha galeator* is widespread in the United States from New England to Wisconsin, south to Florida and Texas.

Family Corixidae

Trichocorixa reticulata (Guérin-Méneville). Hughes and Schuster 1986: 387.

Parish records: Paget, Smith's, Warwick (Mar., July, Oct.).

This species is said to be very common in brackish ponds and tide-wash pools and is often taken in light traps. It is widespread from Florida to California in the United States to South America, and in the West Indies, China, Hawaii, and many of the Pacific Islands.

Family Cydnidae

Subfamily Cydninae

Pangaeus bilineatus (Say). Uhler 1889: 463; Verrill 1902: 388; Ogilvie 1928: 17; Sailer 1954: 43; Froeschner 1960: 463.

Parish records: Paget, Pembroke, Southampton, St. George's (Mar.-Apr., June-July).

This cydnid is commonly taken in light traps and is said to be injurious to strawberries (Ogilvie 1928). It is widespread from the United States to Guatemala (Froeschner 1960).

Rhytidoporus indentatus Uhler. NEW RECORD.

Parish records: Paget, Southampton, St. George's (July, Oct.).

All Bermuda specimens of *R. indentatus* were taken at lights. Although Ogilvie's (1928: 17) specimens apparently are lost, his record of *Aethus* sp., the only other cydnid he listed from Bermuda, probably refers to this species. Previously known only from the West Indies and Florida in the United States (Froeschner 1960).

Family Gerridae

Subfamily Halobatinae

Halobates micans (Eschscholtz). Ogilvie 1928: 18 (as *H. wullerstorfi* [sic], a junior synonym of *H. micans*); Hughes and Schuster 1986: 388.

Parish records: Devonshire, St. George's (June-July).

Bermuda specimens of *H. micans* were taken in a saltwater pool and on south shore beaches. This open-ocean species, widespread in all tropical seas, is distributed in the Atlantic as far north as North Carolina.

Family Lygaeidae

Subfamily Blissinae

Blissus insularis Barber [southern chinch bug]. NEW RECORD.

Parish records: Devonshire, Hamilton, Paget (June-Aug., Oct.).

The first Bermuda specimens of this species were taken in 1979. This severe pest of St. Augustinegrass, *Stenotaphrum secundatum* (Walt.) Ktze. [Poaceae], is widespread in the southern United States, Mexico, and the West Indies.

Subfamily Cyminae

Cymodema breviceps (Stål). NEW RECORD.

Parish record: Paget (July).

This species is most often swept from grasses and sedges. It is widespread from New York to Florida, west to California in the United States, and south through Mexico to Argentina, and in the West Indies.

Cymoninus notabilis (Distant). Scudder 1957: 105; Slater 1964: 423; Brailovsky 1975: 177; Ashlock and Slater 1988: 188.

Parish record: Paget (July).

This lygaeid is widespread from Florida to Texas in the United States to South America, and in the West Indies.

Subfamily Geocorinae

Geocoris punctipes (Say). NEW RECORD.

Parish record: Sandys (Aug.).

This largely predatory species is widespread from the southern United States to Colombia. Only two specimens have been taken in Bermuda, both at Hog Bay Level in 1987.

Subfamily Orsillinae

Nysius scutellatus Dallas. NEW RECORD.

Parish records: Devonshire, Paget, Sandys (Jan., Sept.–Oct., Dec.).

This species previously was recorded as *N. ericae* (Schilling) and *Nysius* sp. by Ogilvie (1928: 18). Barber's (1939: 342) record probably also applies to *N. scutellatus*. We collected this lygaeid on the fruits of *Euphorbia hirta* L. [Euphorbiaceae] at the Botanical Gardens. We note that the genus *Nysius* is in great need of revision and recommend that Bermudian material eventually be reexamined. *Nysius scutellatus* is known from Virginia to Florida in the United States, and the West Indies.

Subfamily Rhyparochrominae

Neopamera bilobata (Say). Van Duzee 1909: 127 (as *Pamera bilobata*), Ogilvie 1928: 18 (as *Pamera bilobata*).

Parish records: Hamilton, Paget, Smith's, Sandys, St. George's (Jan., June, Aug.–Nov.).

This species has been reported in Bermuda on heads of *Chaetochloa* spp. [Poaceae] (Ogilvie 1928). It is widespread from the southern United States to Argentina, and the West Indies.

Ozophora divaricata Barber. NEW RECORD.

Parish records: Devonshire, Smith's (Feb., June–July).

Seven specimens of *O. divaricata* were taken at the Arboretum on *Hibiscus* sp. [Malvaceae]. It previously has been recorded from the Bahamas, the Greater Antilles, and Florida (USA) (Slater and Baranowski 1983).

Paromius longulus (Dallas). Ogilvie 1928: 18 (as *Pamera longula*).

Parish records: Devonshire, Paget, Sandys, Smith's, Southampton, St. George's (Jan.–Feb., Apr., June–Oct.).

This grass-feeding lygaeid has been reported in Bermuda on heads of *Chaetochloa* spp. [Poaceae] (Ogilvie 1928). It is frequently collected by sweeping and is widespread from the United States to South America, and the West Indies.

Pseudopachybrachius vinctus (Say). NEW RECORD.

Parish records: Devonshire, Hamilton, Paget, Pembroke, Sandys, Smith's, St. George's (June–Oct.).

The first specimens of this species were collected at Trott's Pond in 1966. It is widespread from the United States to South America, and the West Indies.

Family Miridae

Subfamily Bryocorinae

Tribe Dicyphini

Cyrtopeltis modesta (Distant). NEW RECORD.

Parish records: Devonshire, Paget, Sandys (Jan., July).

This species, sometimes called the "tobacco suckfly," has been recorded as a tobacco and truck crop pest, but also may be partially predatory. In 1988 one adult and one nymph were taken at the Botanical Gardens on *Dombeya* sp. [Sterculiaceae]. It later was found in abundance on tomato in July. This mirid is widespread from southern United States to South America, and in the West Indies.

Subfamily Mirinae

Tribe Mirini

Dagbertus bermudensis Carvalho and Fontes 1983: 160.

Parish records: Devonshire, Paget, Sandys, Smith's, Southampton (Jan., June–July).

This mirid was reported by Parker (1945: 3) as "the tarnished plant bug or an insect closely resembling the tarnished plant bug. . . ." Records of *Lygus olivaceus* Reuter by Van Duzee (1909: 127), Ogilvie (1928: 19), and Carvalho (1959: 80) and those of *Dagbertus hospitus* (Distant) by Kelton (1974: 378) should be referred to the greenish females of *D. bermudensis*. Van Duzee's (1909: 127) mention of a strongly marked *Lygus* sp. certainly refers to the darker, sexually dimorphic, males of this species. This plant bug is a cupressaceous specialist, apparently preferring *Juniperus bermudiana* L., but adults and nymphs also were commonly found throughout Bermuda on ornamental *Cupressus*, *Juniperus*, and *Thuja* spp. *Dagbertus bermudensis* is the only indigenous heteropteran known from Bermuda.

Lygus lineolaris (Palisot) [tarnished plant bug]. Van Duzee 1909: 127 (as *Lygus pratensis* L.); Ogilvie 1928: 19 (as *L. pratensis*).

Parish records: Devonshire, Hamilton, Paget, Sandys, Smith's, Southampton, St. George's (Jan., May–July, Sept.–Dec.).

Ogilvie (1928) reported this species frequent in Bermuda, causing severe damage to broad beans. It has been recorded as a pest of many plants, including cotton, forage, and many food crops. All reports of *Lygus pratensis* in Bermuda should be referred to *L. lineolaris*. *Lygus lineolaris* is widespread from Canada to northern Mexico.

Taylorilygus pallidulus (Blanchard). Van Duzee 1909: 127 (as *Lygus apicalis* var. *prasinus* Reuter); Ogilvie 1928: 19 (as *Ly-*

gus apicalis var. *prasinus*, *Lygus pabulinus* L., and *Lygus godmani* Distant); Carvalho 1959: 265.

Parish records: Paget, Sandys, Smith's, St. George's (Jan., July, Sept.–Dec.).

Study of Ogilvie's (1928) determined material indicates that all of the species listed above actually are misidentifications of *T. pallidulus*. This species has numerous hosts, mostly in the Asteraceae. In Bermuda, adults and nymphs were common on *Conyza canadensis* (L.) Cronq. [Asteraceae]. It is widespread in the Old World, North to South America, and the West Indies, and is considered nearly cosmopolitan.

Tribe Stenodemini

Dolichomiris linearis (Reuter). NEW RECORD.

Parish record: Sandys (Nov.).

The only specimen known from Bermuda was collected in 1987. This species, most often swept from coastal grasses and sedges, is widespread in the Old World. In the New World it is recorded from Florida and Texas in the United States to South America, and the West Indies.

Trigonotylus tenuis Reuter. Verrill 1902: 387 (as *Trigonotylus ruficornis* (Geoffroy)); Ogilvie 1928: 19 (as *T. brevipes* (Jakovlev)); Kelton 1971: 699 (as *T. dohertyi* (Distant)).

Parish records: Devonshire, Hamilton, Paget, Pembroke, Sandys, Smith's, Southampton, St. George's (Jan., Mar., July–Dec.).

The primary host of this plant bug is bermudagrass, *Cynodon dactylon* (L.) Pers. [Poaceae]. It is widespread in all warmer parts of the world and common from southern United States to South America, and the West Indies. We follow Golub's (1989) treatment of *T. doddi* (Distant) as a junior synonym of *T. tenuis*.

Subfamily Orthotylinae

Tribe Halticini

Halticus bractatus (Say) [garden fleahop-

per]. Waterston 1940: 4 (as *Halticus citri* Reuter).

Parish records: Devonshire, Hamilton, Paget, Sandys, Smith's (Jan., Apr., June–Aug., Oct.–Dec.).

The garden flea hopper is often a serious pest of truck crops. In Bermuda, it has been recorded from celery, cucumber, egg plant, pumpkin, soybean, squash, sweetpotato, and tomato (Waterston 1940). This tiny, often brachypterous, species frequently is mistaken for black flea beetles (Coleoptera: Chrysomelidae). It is widespread from North to South America, and Hawaii and the West Indies.

Subfamily Phylinae

Tribe Leucophoroterini

Tythus parviceps (Reuter). NEW RECORD.

Parish records: Devonshire, Paget, Sandys (Jan., July).

This species is probably predatory on homopteran eggs in grasses, where it is most often collected. It is widespread in Africa, the Mediterranean Region, the West Indies, and from Florida (USA) to Panama.

Tribe Phylini

Rhinacloa clavicornis (Reuter). Schuh and Schwartz 1985: 400.

Parish records: Devonshire, Paget, St. George's, Sandys, Smith's (Jan., July).

In Bermuda, *R. clavicornis* was swept from various Asteraceae in old fields. It is widespread from the southern United States to South America, and in the West Indies (Schuh and Schwartz 1985).

Spanagonicus albofasciatus (Reuter) [white-marked flea hopper]. Ogilvie 1928: 19 (as *Leucopocila albofasciata*).

Parish records: Devonshire, Paget, Sandys (May, July).

This small species has numerous hosts, but favors Fabaceae, and is often destructive to clovers in lawns. It is widespread

from North to South America, and in the West Indies.

Tribe Pilophorini

Sthenaridea vulgaris (Distant). NEW RECORD.

Parish records: Devonshire, Paget, Sandys, Smith's (Jan., June–July, Oct.–Nov.).

In Bermuda, *S. vulgaris* was collected at light traps and by sweeping grasses and sedges. This species, recorded from *Cyperus luzulae* Roth. [Cyperaceae], is widespread from Florida and Texas (USA), the Caribbean Region, and Mexico to southern Brazil (Schuh and Schwartz 1988).

Family Nabidae

Nabis capsiformis Germar. Van Duzee 1909: 127; Ogilvie 1928: 18; Harris 1939: 376.

Parish records: Sandys, Smith's, Southampton, St. George's, Warwick (Jan.–Feb., June–July, Oct.–Nov.).

This nabid preys on coexisting arthropods. It is known from the southern United States to South America, the West Indies, and warmer areas of the Old World.

Family Pentatomidae

Subfamily Asopinae

Podisus maculiventris Uhler [spined soldier bug]. NEW RECORD.

Parish records: Devonshire, Pembroke, Smith's (Jan., Mar., July–Aug., Nov.).

Although never reported, the first Bermuda specimens of this species were collected in 1944. This stink bug is predaceous on lepidopterous larvae, Coleoptera, and other arthropods. It is widespread in North America and has been introduced into Europe and Korea for biological control.

Subfamily Pentatominae

Banasa euchlora Stål [cedar bug, cedar berry bug, green bug]. Verrill 1902: 386; Ogilvie 1928: 17; Parker 1945: 3.

Parish records: Devonshire, Hamilton,

Paget, Sandys, Southampton, Warwick (Jan.–Mar., June).

This stink bug is known to feed on the fruits of *Juniperus* spp. [Cupressaceae]. It is widespread in North America from Maryland, Iowa, and Colorado, to Florida, Arizona, and northern Mexico. Kevan's (1981) tentative referral of an early "greenbug" record to *Nezara viridula* (L.) probably should be applied to this species.

Banasa herbacea (Stål). NEW RECORD.

Parish records: Hamilton, Sandys (Jan., Mar.).

Two Bermuda specimens of this green stink bug were collected at Ft. Scaur in 1987 and 1988 on *Juniperus bermudiana* L. [Cupressaceae]. It is known from the West Indies and southern Florida in the United States.

Mormidea lugens (Fabricius). Verrill 1902: 387; Van Duzee 1909: 127; Ogilvie 1928: 18; McPherson 1982: 54.

Parish records: No Bermuda specimens examined.

This species is primarily a grass feeder, but there are records of adults swarming over numerous other plants (McPherson 1982). Verrill (1902) reported *M. lugens* as injurious to tomatoes and beans in Bermuda. It is known from Quebec to Wyoming in the United States to Mexico, and the West Indies.

Murgantia histrionica (Hahn). [harlequin bug]. Bennett and Hughes 1959: 429; Cock 1985: 134.

Parish records: Paget, Pembroke, Sandys, Southampton, St. George's (Feb., July, Sept., Nov.–Dec.).

This colorful species is often a serious pest of Brassicaceae (cabbage and other cole crops) (McPherson 1982), but it occurs sporadically in Bermuda and is usually of minor importance. It is widespread in North America south to Mexico and Central America and has been accidentally introduced into Hawaii.

Nezara viridula (Linnaeus) [southern green stinkbug]. Verrill 1902: 386; Uhler 1889: 154; Van Duzee 1909: 127 (also as *Nezara* sp. based on unusual nymphs); Ogilvie 1928: 18.

Parish records: Devonshire, Paget, Pembroke, Smith's, St. George's (Jan.–Apr., July–Aug., Oct., Dec.).

This stink bug is an occasional pest of soybeans and numerous truck and fruit crops. Widespread throughout the warmer parts of the world, it is recorded from the southern United States to South America, the West Indies, and the Afrotropical, Australian, Oriental, and Palearctic Regions.

Family Reduviidae

Subfamily Emesinae

Empicoris rubromaculatus (Blackburn). NEW RECORD.

Parish records: Devonshire, Paget, Sandys, Smith's (June, Jan.).

In Bermuda, this small, slender predatory species was taken on *Nerium oleander* L. (oleander) [Apocynaceae], *Pittosporum* sp. [Pittosporaceae], and beaten from a thick hedge of *Viburnum suspensum* Lindl. [Caprifoliaceae]. The first Bermuda specimens were collected in 1987. It is common across the southern United States and is recorded as far north as British Columbia. This species considered nearly cosmopolitan.

Subfamily Harpactorinae

Zelus longipes (Linnaeus). NEW RECORD.

Parish records: Hamilton, Paget, Pembroke, Sandys, Smith's (Jan., Mar., Aug., Oct.–Nov.).

This black and orange predatory species was first collected in 1979 and is now common in many areas of Bermuda. It ranges from Florida to California in the United States to South America, and in the West Indies.

Family Rhopalidae

Harmostes serratus (Fabricius). NEW RECORD.

Parish records: Hamilton, Pembroke, Smith's, St. George's (Jan., June–Oct., Dec.).

Although not previously reported, this was first collected in Bermuda at Trott's Pond in 1966. It is known from Florida and Texas in the United States to South America, and the West Indies.

Liorhyssus hyalinus (Fabricius). Verrill 1902: 387 (as *Corizus hyalinus*); Hambleton (1908: 136); Van Duzee (1909: 127, as *Corizus hyalinus*); Barber 1923: 22 (as *Corizus hyalinus*); Ogilvie 1928: 18.

Parish records: Paget, Sandys, Smith's, Southampton (Jan., June–Dec.).

In Bermuda this nearly cosmopolitan species was taken on "*Ruellia squarrosa*" [as labeled in the Botanical Gardens] [Acanthaceae] and fruits of *Euphorbia hirta* L. [Euphorbiaceae] at the Botanical Gardens. It is also frequently taken by sweeping mixed vegetation. This rhopalid is widespread from North to South America, and the West Indies and is also recorded from Africa, Asia, Australia, Hawaii, and Europe.

Family Scutelleridae

Sphyrocoris obliquus Germar. Ogilvie 1928: 18.

Parish records: No Bermuda specimens examined.

This shield bug is known from Florida to California in the United States, south to Colombia, and the West Indies.

Stethaulax marmoratus (Say). Ogilvie 1928: 18.

Parish records: Paget (Nov.–Dec.).

This species has not been collected in Bermuda since 1924. It is recorded feeding on *Juniperus* sp., *Thuja occidentalis* L. [Cupressaceae], and numerous other trees and shrubs, and has been reared on *Rhus glabra* L. [Anacardiaceae] (McPherson 1982). It is known from New York to Oregon, south to Florida and California.

ACKNOWLEDGMENTS

The success of this work was made possible by the continued support and contribution of funds by Edward Manuel (Director, Bermuda Dept. Agric. and Fisheries, Hamilton). We also thank the BDAF and past Parks Administrator J. Hubert Jones for allowing us to use the Bermuda parish map previously published in the 1979 "Guide to Bermuda's Public Parks and Beaches." Michael R. Wilson (CAB, Intern. Inst. Entomol., London) contributed a large number of nicely prepared specimens he collected in July 1988. Richard C. Froeschner (Dept. Entomol., Smithsonian Inst., Washington, D.C.) kindly identified the two cydnid species and provided several references pertaining to Bermuda Heteroptera. R. C. Froeschner, R. W. Poole (Syst. Entomol. Lab., PSI, ARS, USDA, c/o USNM, Washington, D.C.), F. C. Thompson (SEL, PSI, ARS, USDA), A. G. Wheeler, Jr. (Pennsylvania Dept. Agric., Harrisburg), and M. R. Wilson read the manuscript and offered suggestions for its improvement.

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